



Elgaloy Cast-Ni

REPAIR & MAINTENANCE

Other

Date: 2007-10-19
Revision: 20

Description:

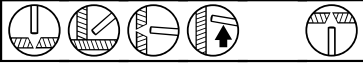
Elgaloy Cast-Ni is a pure nickel electrode for general purpose welding of all types of cast iron. It is suitable for the joining and repair of grey and malleable cast irons and dissimilar joints between these and steel, monel and stainless steels. The electrode will tolerate dirty and contaminated surfaces. No preheat is required for small castings and thin sections up to 15 mm. Above this, preheat up to about 150°C is recommended.

Joint surfaces should be prepared by gouging with Elgaloy Cut or grinding. Select smallest diameter electrode practical, deposit short thin stepped layers and lightly peen the weld beads during welding to reduce shrinkage strains. Avoid arc striking on the base metal. On completion allow the work piece to cool slowly. The deposit is soft and fully machinable.

Applications:

Grey and malleable cast irons, machine bases, engine blocks and gear housings.

Welding positions:



Shielding gas:

Coating type:

Special

Hardness as welded:

150-170 HV

Welding current:

DC + / (-), AC

Chemical composition, wt.%

| | C | Ni | Fe |
|---------|-----|----|-----|
| Min | 0,3 | 92 | 0,5 |
| Typical | 0,5 | 94 | 2,5 |
| Max | 2,0 | 96 | 5,0 |

Mechanical properties

Specified

Typical

Tensile Strength, Rm:

240-290 N/mm²

Elongation, A5

8%

Classification:

EN-ISO 1071

E Ni-CI 3

AWS A5.15-90

E Ni-CI

Approvals:

Product data

| Diam.mm | Product code | Current A | Voltage V | Delivery form |
|---------|--------------|-----------|-----------|---------------|
| 2,5 | 70512510 | 50-90 | | |
| 3,2 | 70513210 | 80-120 | | |